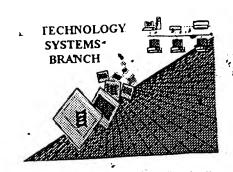
RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information
Center (STIC) detected errors when processing the following computer readable

Application Serial Number:	09/78/87/
Source:	OTPE
Date Processed by STIC:	11/06/01

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

I) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,

2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 c-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 c-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u>

<u>VERSION 3.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND

TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old generated for the original version (new rules) effective July 1, 1998 as well as World Intellectual rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

http://www.uspto.gov/web/offices/pac/checker

DATE: 11/06/2001

TIME: 14:35:42

OIPE

```
Input Set : A:\13381.txt
                     Output Set: N:\CRF3\11062001\1781891.raw
      3 <110> APPLICANT: Delaney, William IV
              Locarnini, Stephen Alister
              Chen, Robert Yung Ming
              Bartholomeusz, Angeline
                                                                 Does Not Comply
              Isom, Harriet
                                                             Corrected Diskette Needed
      9 <120> TITLE OF INVENTION: An assay
     11 <130> FILE REFERENCE: 2378750/EJH
     13 <140> CURRENT APPLICATION NUMBER: 09/781,891
C--> 14 <141> CURRENT FILING DATE: 2001-10-15
     16 <150> PRIOR APPLICATION NUMBER: 60/179948
                                                          1. Invalid 213 response

see page 4 of le A

2. delete 80 Sequend
Non ASCO test
See name 2
     17 <151> PRIOR FILING DATE: 2000-02-03
     19 <160> NUMBER OF SEQ ID NOS: 22
     21 <170> SOFTWARE: PatentIn version 3.0
ERRORED SEQUENCES
     1464 <210> SEQ ID NO: 22
     1465 <211> LENGTH: 4496
     1466 <212> TYPE: DNA
     1467 <213> ORGANISM: HBV 1.5 genome
     1469 <400> SEQUENCE: 22
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     1471 cgccaactta caaggcettt ctaagtaaac agtacatgaa cetttacece gttgctegge
                                                                                  120
     1472 aacggcctgg tctgtgccaa gtgtttgctg acgcaacccc cactggctgg ggcttggcca
                                                                                  180
     1473 taggecatea gegeatgegt ggaacetttg tggeteetet geegateeat actgeggaae
                                                                                  240
     1474 tectageege ttgttttget egeageeggt etggageaaa geteategga aetgaeaatt
     1475 ctgtcgtcct ctcgcggaaa tatacatcgt ttccatggct gctaggctgt actgccaact
                                                                                  360
     1476 ggatccttcg cgggacgtcc tttgtttacg tcccgtcggc gctgaatccc gcggacgacc
                                                                                  420
     1477 cctcgcgggg ccgcttggga ctctctcgtc cccttctccg tctgccgttc cagccgacca
                                                                                  480
     1478 cggggcgcac ctctctttac gcggtctccc cgtctgtgcc ttctcatctg ccggtccgtg
                                                                                  540
     1479 tgcacttcgc ttcacctctg cacgttgcat ggagaccacc gtgaacgccc atcagatcct
                                                                                  600
     1480 geccaaggte ttacataaga ggaetettgg aeteceagea atgteaaega eegaeettga
                                                                                  660
     1481 ggcctacttc aaaqactgtg tgtttaagga ctgggaggag ctgggggagg agattaggtt
                                                                                  720
     1482 aaaggtettt gtattaggag getgtaggea taaattggte tgegeaceag caccatgeaa
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     1483 ctttttcacc tctgcctaat catctcttgt acatgtccca ctgttcaagc ctccaagctg
                                                                                  840
     1484 tgccttgggt ggctttgggg catggacatt gacccttata aagaatttgg agctactgtg
                                                                                  900
     1485 gagttactct cgtttttgcc ttctgacttc tttccttccg tcagagatct cctagacacc
                                                                                  960
     1486 geetcagete tgtategaga ageettagag teteetgage attgeteace teaccatact
                                                                                 1020
     1487 gcactcaggc aagccattct ctgctggggg gaattgatga ctctagctac ctgggtgggt
                                                                                 1080
     1488 aataatttgg aagatccagc atccagggat ctagtagtca attatgttaa tactaacatg
     1489 ggtttaaaga tcaggcaact attgtggttt catatatctt gccttacttt tggaagagag
     1490 actgtacttg aatatttggt ctctttcgga gtgtggattc gcactcctcc agcctataga
                                                                                 1260
     1491 ccaccaaatg cccctatctt atcaacactt ccggaaacta ctgttgttag acgacgggac
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     1492 cgaggcaggt cccctagaag aagaactccc tcgcctcgca gacgcagatc tcaatcgccg
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     1493 cgtcgcagaa gatctcaatc tcgggaatct caatgttagt attccttgga ctcataaggt
                                                                                 1440
     1494 gggaaacttt acggggettt attectetae agtacetate tttaateetg aatggeaaac
                                                             3. See page 4 of 6 B 220 and Field 223 errors
```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/781,891

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/781,891

DATE: 11/06/2001 TIME: 14:35:42

Input Set : A:\13381.txt
Output Set: N:\CRF3\11062001\I781891.raw

					aataggtgtc		1560
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1497	tcctacccac	actaaatatt	tgcccttaga	caaaggaatt	aaaccttatt	atccagatca	1680
1498	ggtagttaat	cattacttcc	aaaccagaca	ttatttacat	actctttgga	aggctggtat	1740
1499	tctatataag	agggaaacca	cacgtagcgc	atcattttgc	gggtcaccat	attcttggga	1800
1500	acaagagcta	cagcatggga	ggttggtcat	caaaacctcg	caaaggcatg	gggacgaatc	1860
1501	tttctgttcc	caaccctctg	ggattctttc	ccgatcatca	gttggaccct	gcattcggag	1920
1502	ccaactcaaa	caatccagat	tgggacttca	accccatcaa	ggaccactgg	ccagcagcca	1980
1503	accaggtagg	agtgggagca	ttcgggccag	ggctcacccc	tccacacggc	ggtattttgg	2040
1504	ggtggagccc	tcaggctcag	ggcatattga	ccacagtgtc	aacaattcct	cctcctgcct	2100
1505	ccaccaatcg	gcagtcagga	aggcagccta	ctcccatctc	tccacctcta	agagacagtc	2160
1506	atcctcaggc	catgcagtgg	aattccactg	ccttccacca	agctctgcag	gatcccagag	2220
1507	tcaggggtct	gtatcttcct	gctggtggct	ccagttcagg	aacagtaaac	cctgctccga	2280
1508	atattgcctc	tcacatctcg	tcaatctccg	cgaggactgg	ggaccctgtg	acgaacatgg	2340
1509	agaacatcac	atcaggattc	ctaggacccc	tgctcgtgtt	acaggcgggg	tttttcttgt	2400
1510	tgacaagaat	cctcacaata	ccgcagagtc	tagactcgtg	gtggacttct	ctcaattttc	2460
1511	tagggggatc	tcccgtgtgt	cttggccaaa	attcgcagtc	cccaacctcc	aatcactcac	2520
1512	caacctcctg	tcctccaatt	tgtcctggtt	atcgctggat	gtgtctgcgg	cgttttatca	2580
1513	tattcctctt	catcctgctg	ctatgcctca	tcttcttatt	ggttcttctg	gattatcaag	2640
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1517	tatgggagtg	ggcctcagtc	cgtttctctt	ggctcagttt	actagtgcca	tttgttcagt	2880
1518	ggttcgtagg	gctttccccc	actgtttggc	tttcagctat	atggatgatg	tggtattggg	2940
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1521	gggctacata	attggaagtt	ggggaacttt	gccacaggat	catattgtac	aaaagatcaa	3120
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					ggatatcctg		3240
1524	tttgtatgca	tgtatacaag	ctaaacaggc	tttcactttc	tcgccaactt	acaaggcctt	3300
1525	tctaagtaaa	cagtacatga	acctttaccc	cgttgctcgg	caacggcctg	gtctgtgcca	3360
1526	agtgtttgct	gacgcaaccc	ccactggctg	gggcttggcc	ataggccatc	agcgcatgcg	3420
1527	tggaaccttt	gtggctcctc	tgccgatcca	tactgcggaa	ctcctagccg	cttgttttgc	3480
1528	tcgcagccgg	tctggagcaa	agctcatcgg	aactgacaat	tctgtcgtcc	tctcgcggaa	3540
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1530	ctttgtttac	gtcccgtcgg	cgctgaatcc	cgcggacgac	ccctcgcggg	gccgcttggg	3660
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1533	gcacgttgca	tggagàccac	cgtgaacgcc	catcagatcc	tgcccaaggt	cttacataag	3840
1534	aggactcttg	gactcccagc	aatgtcaacg	accgaccttg	aggcctactt	caaagactgt	3900
1535	gtgtttaagg	actgggagga	gctgggggag	gagattaggt	taaaggtctt	tgtattagga	3960
1536	ggctgtaggc	ataaattggt	ctgcgcacca	gcaccatgca	actttttcac	ctctgcctaa	4020
1537	tcatctcttg	tacatgtccc	actgttcaag	cctccaagct	gtgccttggg	tggctttggg	4080
1538	gcatggacat	tgacccttat	aaagaatttg	gagctactgt	ggagttactc	tcgtttttgc	4140
1539	cttctgactt	ctttccttcc	gtcagagatc	tcctagacac	cgcctcagct	ctgtatcgag	4200
1540	aagccttaga	gtctcctgag	cattgctcac	ctcaccatac	tgcactcagg	caagccattc	4260
1541	tctgctgggg	ggaattgatg	actctagcta	cctgggtggg	taataatttg	gaagatccag	4320
1542	catccaggga	tctagtagtc	aattatgtta	atactaacat	gggtttaaag	atcaggcaac	4380
1543	tattgtggtt	tcatatatct	tgccttactt	ttggaagaga	gactgtactt	gaatatttgg	4440

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/781,891

DATE: 11/06/2001

TIME: 14:35:42

Input Set : A:\13381.txt

Output Set: N:\CRF3\11062001\1781891.raw

1544 tototttogg agtgtggatt ogcactooto cagootatag accaccaaat goocot

4496

E--> 1550 38

Dolde End of Sequence Non ASCAT Leat

09/78189/

Page 4 of les

<210> 5

<211> 181

<212> PRT

<213> synthetic

I malid 213 response

<220>

<221> variant

<222> (2)..(2)

<223> X = N or D

Does Not Comply
Corrected Diskette Needed

Sequence 10 # 5 11/13/01

1. Field 213 response much he "Artificial Sequence", "Un known or the name of some species.

2. A 213 response of "Artificial Sequence" requires an explanation of for example 'synthetic" on Rield 223

The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

<210> 1 <211> 23 <212> DNA	
<213 x artificial sequence	Foell 223 to mandatory
<400> 1 gcctcatttt gtgggtcacc ata	23
<210> 2 <211> 20 <212> DNA <213> artificial sequence	
<400> 2 tetetgacat actttecaat	Field 223 18 mandatory
	A 213 Beld response of artificial sequence requires an explanation on Reld 225.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/781,891

DATE: 11/06/2001 TIME: 14:35:43

Input Set : A:\13381.txt

Output Set: N:\CRF3\11062001\I781891.raw

```
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:28\ M:258\ W: Mandatory Feature missing, <220> FEATURE:
L:28 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:36 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:36 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L\!:\!341 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:344 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
\text{L:}\,347~\text{M:}\,341~\text{W:} (46) "n" or "Xaa" used, for SEQ ID#:5
L:350 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:353 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:356 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:359 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:362 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:365 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L\!:\!368 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:371 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:374 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:853 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:856 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
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L:883 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
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L:889 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:892 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
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L:1039 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:1042 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:1045 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:1048 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
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L:1070 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
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L:1079\ M:341\ W: (46) "n" or "Xaa" used, for SEQ ID#:7
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L:1085 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:1162 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:1171 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
```

VERIFICATION SUMMARY

DATE: 11/06/2001

PATENT APPLICATION: US/09/781,891

TIME: 14:35:43

Input Set : A:\13381.txt

Output Set: N:\CRF3\11062001\1781891.raw

L:1174 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 L:1199 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 L:1202 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8

L:1547 M:254 E: No. of Bases conflict, LENGTH:Input:1 Counted:4496 SEQ:22

M:254 Repeated in SeqNo=22